

## State Water Resources Control Board

Division of Drinking Water

November 16, 2015

Rachel Arias,  
Mountains Sector Maintenance Chief II  
California State Park – Big Basin  
21600 Big Basin Way  
Boulder Creek, CA 95006

Attention Ms. Arias:

**COMPLIANCE ORDER NO. 02\_05\_15R\_005\_4410301\_02**  
**TOTAL TRIHALOMETHANE MCL EXCEEDANCE**  
**TITLE 22, CALIFORNIA CODE OF REGULATIONS, SECTION 64533 (a)**  
**CALIFORNIA STATE PARKS - BIG BASIN, WATER SYSTEM NO. 4410301**

Enclosed is a Compliance Order issued to the California State Park - Big Basin (CSP Big Basin) water system.

CSP Big Basin will be billed by the State Water Resources Control Board Division of Drinking Water for the time spent on issuing this Compliance Order. Health and Safety Code Section 116577 provides that a public water system must reimburse the Division for actual costs incurred by the Division for specified enforcement actions, including, but not limited to, preparing, issuing and monitoring compliance associated with this violation.

CSP Big Basin will receive a bill from the Drinking Water Fee Branch in August of the next fiscal year. This bill will contain fees for any enforcement time spent on the System for the current fiscal year.

If you have any questions regarding this matter, please contact Jonathan Weininger of my staff at (831) 655-6932 or me at (831) 655-6934.

Sincerely,



Jan R. Sweigert, P.E.  
District Engineer, Monterey District Office  
Northern California Field Operations Branch  
Division of Drinking Water

Enclosure: Compliance Order No. NO. 02\_05\_15R\_005\_4410301\_02

Certified Mail No. 7008 1830 0004 5435 1148

cc: Santa Cruz County Environmental Health Department (w/ enclosures)

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD  
DIVISION OF DRINKING WATER

**Name of Public Water System:** California State Parks – Big Basin

**Water System No.** 4410301

**Attention:** Ms. Rachel Arias  
MS Maintenance Chief, II  
CSP Big Basin State Park  
303 Big Trees Park Rd.  
Felton, CA 95018

**Issued:** November 16, 2015

**COMPLIANCE ORDER NO. 02\_05\_15R\_005\_4410301\_02**  
**VIOLATION OF HEALTH AND SAFETY CODE SECTION 116555(a)(1) AND**  
**TITLE 22, CALIFORNIA CODE OF REGULATIONS, SECTION 64533(a)**  
**THE PRIMARY DRINKING WATER STANDARD FOR**  
**TOTAL TRIHALOMETHANES**

The State Water Resources Control Board (hereinafter "State Board") acting by and through its Division of Drinking Water (hereinafter "Division") and the Deputy Director for the Division, hereby issues this compliance order (hereinafter "Order") pursuant to Section 116655 of the California Health and Safety Code (hereinafter "CHSC") to California State Parks – Big Basin (CSP Big Basin) for violation of CHSC, Section 116555(a)(1) and Title 22, California Code of Regulations (hereinafter "CCR"), Section 64533(a).

1 A copy of the applicable statutes and regulations are included in Appendix 1, which is  
2 attached hereto and incorporated by reference.

### 3 4 **STATEMENT OF FACTS**

5 CSP Big Basin is a publically owned community water system (as defined in CHSC,  
6 Section 116275) located in Santa Cruz County that supplies water for an estimated  
7 transient population of 3,000. CSP Big Basin operates under Domestic Water Supply  
8 Permit No. 86-009, issued on March 13, 1986.

9  
10 CSP Big Basin consists of one local surface water source (Sempervirens Reservoir), one  
11 microfiltration and granular activated carbon surface water treatment plant, sodium  
12 hypochlorite for disinfection, and seven storage tanks (six redwood and one stainless  
13 steel).

14  
15 Pursuant to Title 22, CCR, Section 64534.2(d), CSP Big Basin is required to collect two  
16 distribution system samples per quarter for total trihalomethane (hereinafter "TTHM") and  
17 haloacetic acids (hereinafter "HAA5") in accordance with their approved Stage 2  
18 Disinfection Byproduct Rule Monitoring Plan (hereinafter "DBPR Plan"). Under Title 22,  
19 CCR, Section 64535.2(b)(1), compliance with the TTHM MCL of 0.080 mg/L is based on  
20 a running annual average (hereinafter "RAA") calculated quarterly, for each monitoring  
21 location.

22  
23 A summary of CSP Big Basin TTHM results at its two approved sample locations (Sky  
24 Meadow Residence and Little Basin Main Office) is presented in Table 1. All results are  
25 as reported to the Division by the laboratory that performed the analysis.  
26  
27  
28



**Table 1: TTHM Results in mg/L**

Site		11/21/13	2/9/14	5/21/14	8/18/14	11/18/14	2/19/15	5/21/15	8/20/15
		4Q2013	1Q2014	2Q2014	3Q2014	4Q2014	1Q2015	2Q2015	3Q2015
Sky Meadow Residences	Result	0.043	0.039	0.100	0.044	0.064	0.126	0.117	0.059
	RAA	not in violation of MCL					<b>0.084</b>	<b>0.088</b>	<b>0.092</b>
Little Basin Main Office	Result	0.084	0.170	0.160	0.140	0.110	0.221	0.195	0.220
	RAA	addressed in previous enforcement action			<b>0.139</b>	<b>0.145</b>	<b>0.158</b>	<b>0.167</b>	<b>0.187</b>

RAA = Running Annual Average example: (4Q2014+1Q2015+2Q2015+3Q2015)/4

**Bold** indicates exceedance of MCL based on RAA

Title 22, CCR, Section 64535.2(b)(1) specifies: for systems monitoring quarterly, the running annual arithmetic average, computed quarterly, of quarterly arithmetic averages of all samples collected pursuant to Section 64534.2(a) shall not exceed the MCLs specified in Section 64533 (0.080 mg/L for TTHM).

As shown in Table 1, the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters RAA in 2015 for the Sky Meadow Residence, and 3<sup>rd</sup> and 4<sup>th</sup> quarters RAA in 2014 and 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters RAA in 2015 for the Little Basin Main Office exceed the TTHM MCL of 0.080 mg/L.

CSP Big Basin was previously issued Citation No. 02-05-14C-011, on August 14, 2014, for exceeding the TTHM MCL based on the RAA at the Little Basin Main Office sample location in second quarter 2014. The Division is issuing this Order to update the Directive section of the previously issued Citation No. 02-05-14C-011.

### DETERMINATIONS

Based on the above Statement of Facts, the Division has determined that CSP Big Basin has violated CHSC, Section 116555 and Title 22, CCR, Section 64533(a) in that CSP Big

1 Basin failed to comply with the MCL for TTHMs at the Sky Meadow Residence for the  
2 four-quarter monitoring periods ending with the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2015, and at  
3 the Little Basin Main Office sites for the four-quarter monitoring periods ending with the  
4 3<sup>rd</sup> and 4<sup>th</sup> quarters of 2014 and 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2015. For a public water  
5 system monitoring quarterly, each locational running annual average (hereinafter  
6 "LRAA"), computed quarterly, shall not exceed the MCL of 0.080 mg/L for TTHM, which  
7 consists of chloroform, bromodichloromethane, dibromochloromethane, and bromoform.  
8 The Division further has determined that said violation has continued through the date of  
9 this Order.

## 10 11 DIRECTIVES

12 CSP Big Basin is hereby directed to take the following actions:

- 13  
14 1. On or before **December 31, 2017**, comply with Title 22, CCR, Section  
15 64533(a) and remain in compliance.
- 16  
17 2. CSP Big Basin shall continue to provide quarterly public notification to all  
18 residents and employees in accordance with the Division approved notification  
19 of CSP Big Basin's failure to meet the TTHM MCL during any calendar quarter  
20 that the four-quarter running annual average exceeds the MCL. The public  
21 notification must be submitted to the Division for approval prior to distribution.
- 22  
23 3. Proof of notification shall be sent to the Division within 10 days following the  
24 end of each quarter that CSP Big Basin is still in violation of the TTHM MCL.
- 25  
26 4. By **January 20, 2016**, CSP Big Basin shall submit to the Division for review  
27 and approval, a Corrective Action Plan that identifies improvements to CSP

1 Big Basin's water system designed to correct the water quality problem  
2 (violation of the TTHM MCL) and ensure that CSP Big Basin delivers water to  
3 consumers that meets primary drinking water standards. The plan shall include  
4 a time schedule for completion of each of the phases of the project. The  
5 project phases shall include planning, design, construction, completing an  
6 operations plan, and startup, and a date as of which CSP Big Basin will be in  
7 compliance with the TTHM MCL, which shall be no later than **December 31,**  
8 **2017.**  
9

- 10 5. On or before **January 20, 2016**, present the Corrective Action Plan required  
11 under Directive No. 4, above to the Division in person at the Division's office  
12 located at 1 Lower Ragsdale Drive, Building 1, Suite 120, in Monterey,  
13 California. Please contact the Monterey District office in advance to schedule  
14 an appointment.  
15  
16 6. Complete the Division-approved Corrective Action Plan and each and every  
17 element of said plan according to the time schedule set forth therein.  
18  
19 7. On or before **April 10, 2016** and every three months thereafter, submit a report  
20 to the Division showing actions taken during the previous calendar quarter to  
21 comply with the Corrective Action Plan, as follows:

Quarter	Report Due Date
January 1 – March 31	April 10 of same year
April 1 – June 30	July 10 of same year
July 1 – September 30	October 10 of same year
October 1 – December 31	January 10 of next year



- 1 8. CSP Big Basin shall continue to collect quarterly samples for TTHM and HAA5  
2 at the two approved sample locations (Sky Meadow Residence and Little  
3 Basin Main Office) according to CSP Big Basin's approved DBPR Plan and  
4 ensure that the analytical results are reported to the Division electronically by  
5 the analyzing laboratory no later than the 10<sup>th</sup> day following the month in which  
6 the analysis was completed.  
7  
8 9. Until formally notified of their return to compliance, CSP Big Basin shall include  
9 information regarding the TTHM MCL violation identified in this Compliance  
10 Order in the annual Consumer Confidence Reports, which must be completed  
11 and distributed by **July 1<sup>st</sup> of every year**. A draft of the each Consumer  
12 Confidence Report shall be submitted to the Division for review and approval  
13 prior to distribution and/or posting.  
14  
15 10. Not later than ten (10) days following the date of compliance with the TTHM  
16 MCL, demonstrate to the Division that the water in the distribution system as  
17 sampled at the approved sample sites by CSP Big Basin complies with the  
18 TTHM MCL.  
19  
20 11. Notify the Division in writing no later than five (5) days prior to the deadline for  
21 performance of any Directive set forth herein if CSP Big Basin and/or its owner  
22 of record anticipate it will not timely meet such performance deadline.  
23

24 All submittals required by this Order shall be submitted to the Division at the following  
25 address:

1 Jan R. Sweigert, P.E.  
2 District Engineer, Monterey District Office  
3 State Water Resources Control Board  
4 Division of Drinking Water  
5 1 Lower Ragsdale Drive, Building 1, Suite 120  
6 Monterey, CA 93940  
7

8 As used in this Order, the date of issuance shall be the date of this Order; and the date of  
9 service shall be the date of service of this Order, personal or by certified mail, on the  
10 California State Parks – Big Basin or its owner of record.  
11

12 The Division reserves the right to make such modifications to this Order and/or to issue  
13 such further order(s) as it may deem necessary to protect public health and safety. Such  
14 modifications may be issued as amendments to this Order and shall be deemed effective  
15 upon issuance.  
16

17 Nothing in this Order relieves California State Parks – Big Basin or its owner of record of  
18 its obligation to meet the requirements of the California Safe Drinking Water Act (SDWA),  
19 or any regulation, standard, permit or order issued thereunder.  
20

## 21 **PARTIES BOUND**

22 This Order shall apply to and be binding upon California State Parks – Big Basin, its  
23 owners, shareholders, officers, directors, agents, employees, contractors, successors,  
24 and assignees.  
25

## 26 **SEVERABILITY**


27 The Directives of this Order are severable, and California State Parks – Big Basin and its  
28 owner of record shall comply with each and every provision hereof, notwithstanding the  
29 effectiveness of any other provision.





1 **FURTHER ENFORCEMENT ACTION**

2 The California SDWA authorizes the State Board to: issue an order with assessment of  
3 administrative penalties to a public water system for violation or continued violation of the  
4 requirements of the California SDWA or any regulation, permit, standard, citation, or  
5 order issued or adopted thereunder including, but not limited to, failure to correct a  
6 violation identified in a citation or compliance order. The California SDWA also  
7 authorizes the State Board to take action to suspend or revoke a permit that has been  
8 issued to a public water system if the public water system has violated applicable law or  
9 regulations or has failed to comply with an order of the State Board; and to petition the  
10 superior court to take various enforcement measures against a public water system that  
11 has failed to comply with an order of the State Board. The State Board does not waive  
12 any further enforcement action by issuance of this Order.

13  
14   
15 \_\_\_\_\_  
16 Stefan Cajina, P.E., Chief  
17 North Coastal Section  
18 State Water Resources Control Board  
19 Division of Drinking Water

Nov. 16, 2015  
\_\_\_\_\_  
Date



20  
21  
22 Certified Mail No. 7008 1830 0004 5435 1148  
23  
24  
25  
26  
27

28 cc: Santa Cruz County Environmental Health Department (no attachments)  
29

1  
2 **APPENDIX 1. APPLICABLE STATUTES AND REGULATIONS FOR**  
3 **COMPLIANCE ORDER NO. 02\_05\_15R\_005\_4410301\_02**  
4

5 **CHSC, Section 116555(a)(1) states in relevant part:**

6 (a) Any person who owns a public water system shall ensure that the system does all of  
7 the following:

8 (1) Complies with primary and secondary drinking water standards.  
9

10 **CHSC, Section 116655 states in relevant part:**  
11

12 (a) Whenever the department determines that any person has violated or is violating this  
13 chapter, or any permit, regulation, or standard issued or adopted pursuant to this chapter,  
14 the director may issue an order doing any of the following:

15 (1) Directing compliance forthwith.

16 (2) Directing compliance in accordance with a time schedule set by the  
17 department.

18 (3) Directing that appropriate preventive action be taken in the case of a  
19 threatened violation.

20 (b) An order issued pursuant to this section may include, but shall not be limited to, any  
21 or all of the following requirements:

22 (1) That the existing plant, works, or system be repaired, altered, or added to.

23 (2) That purification or treatment works be installed.

24 (3) That the source of the water supply be changed.

25 (4) That no additional service connection be made to the system.

26 (5) That the water supply, the plant, or the system be monitored.



(6) That a report on the condition and operation of the plant, works, system, or water supply be submitted to the department.

**Title 22, CCR, Section 64533(a) (hereinafter “Section 64533(a)”)**, states in relevant part:

(a) Using the monitoring and calculation methods specified in sections 64534, 64534.2, 64535, and 64535.2, the primary MCLs for the disinfection byproducts shown in table **64533-A** shall not be exceeded in drinking water supplied to the public.

**Table 64533-A**

Maximum Contaminant Levels and Detection Limits for  
Purposes of Reporting Disinfection Byproducts

	<i>Maximum Contaminant</i>	<i>Detection Limit for Purposes of Reporting</i>
<i>Disinfection Byproduct</i>	<i>Level (mg/L)</i>	<i>(mg/L)</i>
Total trihalomethanes (TTHM)	0.080	
Bromodichloromethane		0.0010
Bromoform		0.0010
Chloroform		0.0010
Dibromochloromethane		0.0010

Compliance with the TTHM maximum contaminant level (hereinafter “MCL”) is determined by Title 22, CCR, Section 64535.2(b), which states:

(b) TTHM and HAA5 MCL compliance, as monitored pursuant to section 64534.2(a), shall be determined as follows:

(1) For systems monitoring quarterly, the running annual arithmetic average, computed quarterly, of quarterly arithmetic averages of all samples collected





1 pursuant to section 64534.2(a) shall not exceed the MCLs specified i section  
2 64533;

3 (2) For systems monitoring less frequently than quarterly, the average of samples  
4 collected that calendar year pursuant to section 64534.2(a) shall not exceed the  
5 MCLs specified in section 64533. If the average of the samples collected under  
6 section 64534.2(a) exceeds the MCL, the system shall increase monitoring to  
7 once per quarter per treatment plant. Compliance with the MCL shall then be  
8 determined by the average of the sample that triggered the quarterly monitoring  
9 and the following three quarters of monitoring, unless the result of fewer than four  
10 quarters of monitoring will cause the running annual average to exceed the MCL,  
11 in which case the system is in violation immediately. After monitoring quarterly for  
12 four consecutive quarters (including the quarter that triggered the quarterly  
13 monitoring), and until such time as monitoring returns to routine monitoring  
14 pursuant to section 64534.2(a)(3), compliance shall be determined pursuant to  
15 paragraph (1);

16  
17 (3) If the running annual arithmetic average of quarterly averages covering any  
18 consecutive four-quarter period exceeds the MCL, the system is in violation of the  
19 MCL and shall notify the public pursuant to sections 64463, 64463.4, and 64465,  
20 including language in appendix 64465-G, in addition to reporting to the State  
21 Board pursuant to sections 64537 through 64537.6; and

22  
23 (4) If a public water system fails to complete four consecutive quarters of  
24 monitoring, compliance with the MCL for the last four-quarter compliance period  
25 shall be based on an average of the available data.

